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A YELLOW PERCH PROBLEM

Near the village of Rensselaerville, New York, about thirty miles southwest of Albany, two ponds are located. The smaller of the two is the higher, the overflow of this pond communicating with the lower pond by a small stream which is practically dry in hot weather. The water in this stream comes from the small pond over a dam of perhaps ten or twelve feet high. To my knowledge, fish inhabiting the two ponds are as follows: Small pond,—Perch, Pickerel, Sunfish; Large pond,—Perch, Pickerel and a few Black Bass.

In the four or five years I have gone to this locality, I have invariably caught very small Perch in the large pond and large ones in the small pond. In fact, with one exception, I have never caught anything over six or seven inches long in the large pond, and never caught anything as small as this in the small pond. I am, therefore, rather interested in the peculiar conditions which bring about this growth of the species. Can anyone throw some light on the subject?

G. R. Parker,
Garden City, N. Y.

NOTES ON MARINE FISHES OF NEW YORK.

Since the publication of Fishes of the Vicinity of New York City, 1918, American Museum of Natural

History, Handbook Series No. 7, additional data concerning the occurrence of some marine species within 50 miles of New York City has been obtained, which is presented herewith.

Hickory Shad *(Pomolobus mediocris)*. A large one taken July 8 at Sandy Hook with the seine, proving that the species is present in local waters earlier than August.

Weakfish *(Cynoscion regalis)*. Leonard Hulit states that a number of years ago he took a Weakfish of about six pounds' weight off Asbury Park, N. J., on December 6.

Goggle-eyed Scad *(Trachurops crumenophthalmus)*. One of these fish, six inches in total length, was picked up quite fresh near high tide line on the beach at Long Beach, Long Island, October 12, 1920. This is a later date than mentioned in the "List of Local Fishes," but doubtless the species occurs still later in the fall, to correspond with dates mentioned by Latham for Orient (*Copeia,* Nos. 31 and 57). To judge from the colors which this individual still retained, the species must be a very beautiful one in life. It had a narrow yellow stripe from top of gill-cover to top of peduncle, bronzy on one side of the fish, greenish on the other. Below this stripe silver-white, iridescent with pinks and blues. Top of back dark, steel-blue in certain lights. On one side a dull sea-green area between this and the yellow stripe. Iris dark brown. Top of snout, and chin, blackish. Caudal dusky, darkest at the tips.

False Albacore *(Gymnosarda alleterata)*. According to Mr. Van Campen Heilner this species is regularly rather common off the New Jersey coast in September. His earliest record of its capture is Spring Lake, August 23, 1916. The name. "Albacore," seems well established for it, which throws some doubt on reported occurrence locally of the true Albacore, *Germo alalunga.*

Cowfish *(Lactophrys tricornis)*. Mr. J. A. Fisher of Sayville secured a small individual of this species near Fire Island Beach, Great South Bay (No. 7301, Am. Mus. Nat. Hist.) about November 1, 1919. This is an addition to the local list.

Silver Hake *(Merluccius bilinearis)*. Resident in small numbers, abundant in late fall and spring, uncommon in summer.

Cod *(Gadus callarias)*. September 28, 1919 (N. Y. *Sun* of Sept. 30) is an early date for fall arrival of this species, which occurs occasionally and irregularly, usually small individuals, during the summer.

J. T. NICHOLS,
New York, N. Y.

A NOTE ON THE CALIFORNIA SPECIES of *Osmerus*.

Contrary to the statement of Miss Fisk, the development of a single tooth at the tip of the tongue is not a diagnostic feature of *Osmerus attenuatus*[1], for it is also developed in *O. thaleichthys* and in specimens at hand of *O. starksi*. There exists, however, an important difference in dentition, characteristic of *attenuatus:* in this species there is developed a moderate vomerine canine, often flanked on one side by a smaller tooth, and rather widely separated from the palatine teeth, of which the anteriormost is frequently enlarged to form a canine like that of the vomer. These features technically exclude *attenuatus* from the nominal genus *Spirinchus,* to which group it appears, nevertheless, to belong. *Spirinchus* (and *Eperlanio*) do not seem to the writer worthy of recognition, at least not as genera distinct from *Osmerus.*

Specimens corresponding in most respects with the original account of *Osmerus starksi,* a species lately described by Miss Fisk[2], are of not infrequent, though perhaps never abundant occurrence in the San Fran-

[1]Lockington, Proc. U. S. Nat. Mus., 3, 1880, p. 66; Jordan and Evermann. Bull. U. S. Nat. Mus. 47, 1896, p. 523; Fisk, Proc. U. S. Nat. Mus., 46, 1913, p. 294.
[2]Proc. U. S. Nat. Mus., 46, 1913, p. 293, text fig.

cisco markets, being mixed in with larger lots of *O. thaleichthys* and *attenuatus*. In specimens at hand, however, the dentition does not conform closely to that indicated in the type-description: a single tooth is developed at the tip of the tongue, as in *attenuatus;* the teeth of the jaws are not stronger than in the other Californian species; the vomerine and palatine teeth form a subcontinuous series as in *O. thaleichthys*. In its distinctive features *starksi* appears to be rather invariably intermediate between *thalcichthys* and *attenuatus*. All these facts suggest the possibility that *starksi* may be a nominal species based on hybrids.

CARL L. HUBBS,
University of Michigan.

A PREOCCUPIED NAME IN *Hyla*.

In 1912 I described a *Hyla monticola* (Mem. M. C. Z., 40, 1912, p. 127, pl. 1, fig. 2) from Washan in Szechuan, a mountain near the Tibetan frontier. I notice now that Cope (Jour. Acad. Nat. Sci. Phila., N. S., 8, 1875, (1876),p. 106) made use of the name *monticola* for a socalled subspecies of *Hyla punctariola* Peters from Costa Rica. As this name may in time be forced into use as a full specific designation, it is necessary to rename the Chinese form. It may, therefore, be called *Hyla bambusicola.*

T. BARBOUR,
Cambridge, Mass.

AN EARLY RECORD FOR THE OVIPOSITION AND HATCHING OF THE MILK SNAKE.

During the night of July first a milk snake, *Lampropeltis triangulum triangulum* (Lacepede), donated to the American Museum by Mr. R. Blaschke, laid eleven eggs. The snake which had been recently secured at Cold Spring-on-Hudson was confined during the day in an ordinary wooden cage and on the morn-

ing of July second it was found resting upon but not encircling the freshly laid eggs. These eleven eggs were closely adherent, all orientated in the same direction with their long axis perpendicular to the wooden floor. They measured 32, 34, 34, 34, 35, 35, 35, 36, 37, 38, and 38 millimeters respectively along their greatest length.

After preserving the embryo from one of the eggs, the remaining ten eggs were transferred to a filter paper lined hollow in a small terrarium. The earth in the terrarium was kept slightly moist during the following weeks, and no direct sunlight was allowed to fall upon it. On July eleventh another embryo was preserved. On August eighteenth the first sign of hatching occurred in the appearance of a longitudinal slit about a centimeter long near the upper end of one of the eggs. Examination of an adjacent egg disclosed a fully formed embryo but still possessing a yolk sack measuring roughly 22 x 15 x 12 millimeters. No further sign of hatching was noted during the days immediately following. On the morning of September second it was discovered that all the snakes had escaped from the eggs and had already shed their skins. The terrarium had not been closely watched from August thirtieth to September first inclusive and it is very probable that the hatching occurred during this interval. I know of no other record for the hatching of the milk snake in August.

No decided increase in the size of the eggs was noticed as development proceeded. The empty shells of the eight eggs remaining September second measured along their long axis 31, 33, 33, 33.5, 34, 34, 35, and 35 mm. respectively.

The embryos developed rapidly. The specimen preserved on July second measured 8 mm. in greatest length as it lay coiled upon the yolk. Its head was 3.5 mm. long. The specimen preserved July eleventh had a length when in its embryonic coiled position of 11.5 mm., while its head measured 5.5 mm. The em-

bryo killed August eighteenth was practically fully developed. It measured 231 mm. when extended. The eight specimens preserved on September second measured 241 mm., minimum, to 254, maximum (249.2 mm. average) in total length. The adult female measured 1010 mm.

The series of nine young (including the embryo preserved August eighteenth) does no show much variation in scutellation. They all possess as their parent 21 dorsal rows of scales in the middle of the body. The gastrosteges and urosteges of the parent number 198/43. Only two of the young are females. Their formulae for the ventral scales are 201/50 and 202/48 respectively. The seven young males have the following formulae: 187/51, 198/50, 195/52, 194/51, 194/50, 200/52, and 198/50 (average 195.1/51.1).

G. K. Noble,
New York, N. Y.

A PARTLY SPOTTED KING SNAKE
(Lampropeltis getulus).

On October 13, 1920, while we were on a tramp to Neuse River, near Raleigh, N. C., my friend, Mr. Franklin Sherman, picked up a small King Snake about two feet long and handed it to me. As it was rather unusual in its markings from the ordinary run of the species, which is common here, I give below a brief description.

Black above with narrow crossbands or *roundish spots* of white, as follows,—a white cross bar across the nape, behind this an oblique white cross bar, running back from right to left, then eight roundish white spots on the right and seven on the left side, these representing the bases of the lacking crossbands and alternating, not opposite one another, then four diagonal crossbars from left to right, followed by two spots

on each side, alternating, then another diagonal cross bar from left to right followed by another from right to left, next a spot on the right side, then two diagonal bars from left to right, followed by another straight across, and three more diagonally from right to left, the last being directly over the vent. Tail with six cross bars, these being straight across or nearly so.

Total number of cross bars on body, fourteen, of which two were straight across, five diagonally back from right to left, and seven diagonally in the opposite direction. The roundish spots total eleven on the right and nine on the left side.

Besides the partially spotted condition of this specimen it is notable that the cross bars are almost entirely oblique, not straight across, only two of the bars on the body being straight while the spots are in every case alternate, not opposite the spots on the other side, thus showing themselves to be the bases of what would have been diagonal and not straight cross bands.

C. S. Brimley,
Raleigh, N. C.

Coleonyx variegatus (Baird) IN UTAH.

It is surprising to find *Coleonyx variegatus* in Utah. I have two specimens of this interesting lizard, taken on the hills west of St. George, Washington County, Utah, in March, 1918, by Mr. V. M. Tanner. Another specimen is in the museum of the Utah Agricultural College, collected in St. George, July 25, 1908, by Dr. E. D. Ball. I am informed by residents of southwestern Utah that this lizard is fairly common all around St. George. This considerably extends the distribution of *Coleonyx,* as it has formerly not been recorded north of Tucson, Arizona. It seems to be generally conceded by students that *Coleonyx* is nocturnal, resting during the day under stones or any-

thing else that affords protection. In Utah it is, in part at least, diurnal, as it is not infrequently seen abroad in the daytime. A rather common belief is that this lizard is poisonous, on the assumption that it is a young gila monster.

HERBERT J. PACK,
Logan, Utah.

EMBELLISHED GARTER SNAKE IN BRITISH COLUMBIA

Two specimens of the harmless Embellished Garter Snake *(Thamnophis sirtalis concinnus)*, as identified by Mr. Clyde L. Patch, were collected by Harlan I. Smith of the Canadian Geological Survey at Bella Coola, B. C., during the past summer and are said to make the northern record for this snake which ranges in the coastal region of British Columbia, Vancouver Island, Washington and Oregon. Mr. Smith believes, however, that he has seen a similar snake, perhaps the same variety, in the Provincial Museum, Victoria, B. C. This snake eats frogs, toads, salamanders and, to some extent, small fish.

HARLAN I. SMITH,
Bella Coola, B. C.

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